

REMARKS

The Examiner has maintained an objection to the claim to priority, as the necessary language is not yet contained in the specification. The specification has been amended to include the necessary language and removal of this objection is requested. The Examiner has also noted that a translated copy of the foreign application has not yet been filed. According to U.S. Patent Rules and Regulations, a certified translation of a foreign priority document is required when an application "becomes involved in an interference..., when necessary to overcome the date of a reference relied upon by the Examiner, or when specifically required by the Examiner." In view of the present amendments to the claims and remarks, Applicants request clarification as to why and/or if the Examiner is specifically requiring a certified translation of the foreign priority document.

The claims have been amended to recite a feed for fish or crustaceans which comprises a feed additive with the recited characteristics. Support for the amendment can be found *inter alia* at page 9, lines 10-21. In addition, Applicants note U.S. Patent No. 5,215,767, a copy of which is provided with this response, wherein various feeds for fish and shellfish are described, thus indicating that the term feed as applied to a feed for fish or crustaceans was well known to those of ordinary skill in the art at the time of Applicants' invention. (See also U.S. Patent No. 5,401,727, Col. 7, lines 31-65, also attached herewith)

35 U.S.C. second paragraph rejections

Claims 6, 12 and 15 were rejected under 35 U.S.C. ¶ 112, second paragraph as indefinite. Claim 12 has been canceled without prejudice to future presentation and

claims 6 and 15 have been amended. It is believed that these amendments have overcome this grounds of rejection and its withdrawal is requested.

35 U.S.C. 102(b) rejections

Claims 1, 2, 4-6, 9 and 10-12 remain rejected under 35 U.S.C. ¶ 102(b) as being anticipated by U.S. Patent No. 5,346,891 issued to Soma et al. (Soma 1). The Examiner is of the opinion that Soma 1 discloses three novel lipopolysaccharides having molecular weights of $5,000 \pm 1000$ and $6,500 \pm 2,500$ and that the products are used as immunity stimulators for different animals. The Examiner is further of the opinion that Soma 1 teaches a 96% pure LPS with the dominant molecular weight of $5,000 \pm 1000$ and *Pantoea agglomerans* as the bacteria producing the novel polysaccharides.

Claims 1, 2, 5, 6, 9 and 11-12 were also rejected under 35 U.S.C. ¶ 102(b) as anticipated by Mizuno et al. The Examiner is of the opinion that Mizuno et al. teaches a product from the *Pantoea* species that is a lipopolysaccharide having a molecular weight of $5,000 \pm 1000$ that is capable of activating immunity and preventing infection.

Claims 1, 2, 5, 6 and 9-12 were rejected under 35 U.S.C. ¶ 102(b) as anticipated by U.S. Patent No. 5,494,819 issued to Soma et al. (Soma 2). The Examiner is of the opinion that Soma 2 discloses a product from a gram negative bacteria that is lipopolysaccharide having a molecular weight of $5,000 \pm 1000$ that is capable of activating immunity. The Examiner is further of the opinion that Soma 2 discloses the use of the product as a feed additive for veterinary use.

The relevant claims have been amended or canceled where appropriate and now recite "a feed" for fish or crustaceans which comprises a feedstuff additive, the feedstuff additive characterized in that it is prepared from gram - negative bacteria. The cited references do not recite a feed and thus cannot anticipate the claims as amended. Based on the amendments to the claims, it is believed that these grounds of rejection have been overcome and their withdrawal is requested.

Claim 4 is directed to a method directed to activating immunity in crustaceans or fishes, wherein the method comprises administering to the crustaceans or fishes a feed as in claim 1. Based on the amendment to claim 4, it is believed that this grounds of rejection has been overcome and its withdrawal is requested.

Based on the above remarks and amendments to the claims, it is believed that all of the claims are not anticipated by the cited references and satisfy the provisions of 35 U.S.C. 102.

35 U.S.C. 103(a) rejections

Claims 1-12 and 15-16 were rejected under 35 U.S.C. § 103(a) as unpatentable over Soma 2 in view of U.S. Patent No. 5,641,761 issued to Takahashi et al. (Takahashi). The Examiner is of the opinion that Soma 2 discloses a product from a Gram negative bacteria that is a lipopolysaccharide having a molecular weight of $5,000 \pm 1000$ that is capable of activating immunity. The Examiner is further of the opinion that Soma 2 discloses the use of the product as a feed additive for veterinary use. The Examiner is of the opinion that Takahashi teaches a feedstuff that is active as a preventative agent against infectious diseases of crustaceans which comprises a polysaccharide from fungi. The Examiner is also of the opinion that Takahashi discloses

a method for preventing infectious disease in crustaceans which comprises feeding the crustaceans a water soluble form of the disclosed feedstuff. Based upon the combination of these two references, the Examiner is of the opinion that it would have been obvious to replace the glucan of Takahashi with the low molecular weight lipopolysaccharide of Soma 2.

The Examiner also rejected claim 4 as obvious under 35 U.S.C. ¶ 103(a) as unpatentable over Takahashi in view of Soma 2.

As noted in the U.S. PTO Manual of Patent Practice and Procedure (MPEP), when combining two or more references, there must be some motivation to combine the references. The motivation must be express in the references or in the knowledge generally available to one of ordinary skill in the art at the time of the invention. Secondly, the MPEP notes that there must be a reasonable expectation of success if the references are combined.

In response to the foregoing obviousness rejections, Applicants respectfully submit that the requirements for combining references are not taught or suggested in either Soma 2 or Takahashi. Nor has the Examiner provided any evidence of a reasonable expectation of success in making the combinations.

For at least the foregoing remarks, it is believed that the pending claims are unobvious in view of the prior art and withdrawal of this grounds of rejection is requested.

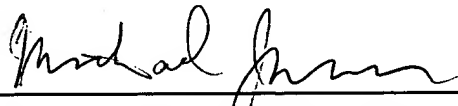
Based on the above remarks and amendments to the claims, it is believed that all of the claims are not anticipated by the cited references and satisfy the provisions of 35 U.S.C. 103.

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In view of the above amendments and remarks, it is believed that all of the claims of the present application satisfy all of the provisions of the patent statutes and early allowance of all of the claims is requested. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

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Attached: U.S. Patents 5,401,727 and 5,215,617